

REMARKS

Reconsideration of the above-identified application in view of the following remarks is respectfully requested. No new material or amendments have been entered.

Claims 1 – 9 and 11 – 33 are in this case.

- The Examiner has rejected claims 1 - 5, 11, 17, 23, and 31 - 33 under 35 USC §102(b) as being anticipated by Yahoo Games.
- The Examiner has moreover rejected claims 6 - 7, 8 - 9, 12, 13 - 14, 15, 16, 18 - 19, 20, 21 - 22, 24 - 25, 26, 27, and 28 - 30 under 35 USC §103(a) as being unpatentable over Yahoo Games in view of various other prior art as cited in the Office Action.

The above rejections are respectfully traversed, as set forth in detail below.

To assist the Examiner in making reference to documentary material included as supporting evidence for the present response, the pages of the documentary material have been numbered as page A-1 through page A-18.

Overview of Traverse of the Rejections

The Examiner has based the above rejections on the assertion that Yahoo Games (“Yahoo”) anticipated the relevant claims. These rejections are respectfully traversed, on the basis that:

- Certain material submitted and relied upon by the Examiner as prior art in fact does not qualify as prior art against the present application because the priority date of the present application is earlier than that of this material submitted by the Examiner. (Details on page 4 of the present response.)

- The entirety of the primary material submitted and relied upon by the Examiner as prior art in fact does not qualify as prior art against the present application in any case, because the submitted material does not actually demonstrate anticipating the invention, nor does this material anticipate the claims of the present application. (Details on page 11 of the present response.)
- The independent claims of the present application prominently and explicitly state the limitation of software protection, which defines the context of the claims and which gives meaning and utility to the claims, in keeping with the central theme of the invention as set forth in the present application. The context of software protection, however, is absent from all materials cited by the Examiner as prior art, which instead exhibit a completely different context (game-playing) with characteristics and requirements wholly unrelated to the context of the present invention and the present application (software protection). The essential limitation of software protection is thus neither anticipated nor suggested by any of the materials presented as prior art. (Details on page 14 of the present response.)

These points are individually detailed below, beginning on the page numbers noted.

Prior Art and Priority Date of the Present Application

The present application claims benefit of U.S. Provisional Patent Application Number 60/199,373 filed April 21, 2000,¹ and therefore any prior art cited against the present application should be dated prior to that filing date of April 21, 2000.

In addition to material related to general issues of computer programming (such as Wright “Dynamic Data Structures”, Sommerer, Menezes, and Müller), the Examiner has cited a patent from another field (US 6,070,254 to Pratt, et al., related to file system integrity checking), and has submitted 17 pages of material related to “Yahoo Games” (herein denoted as “Yahoo”), which is represented in the Office Action as primary prior art against the present application.

Included in the above material submitted by Examiner as prior art, there are several documents which bear dates later than the priority date of April 21, 2000 of the present application, or which cannot be definitely identified as being prior to that date. These documents include:

- the entire “Müller” reference, “A Survey of Programming Techniques” dated March 2, 2005 (see detailed discussion below);
- the “Yahoo Games” material related to “Create Your Yahoo! ID”, pages numbered by the Examiner as pages 3 - 5, dated March 2, 2005;
- a “Yahoo Games” “Backgammon” screen shot, page numbered by the Examiner as page 6, bearing no date, and apparently downloaded from the Internet at about the same time as the above-referenced material;
- a “Yahoo Games” “Sign-in and Registration Help” page, numbered by the Examiner as page 16, from an archive dated October 18, 2000; and

1. as claimed in the Applicant’s Declaration signed April 3, 2001 and filed April 5, 2001; and as documented in the official USPTO Filing Receipt, Confirmation No. 6750, mailed August 30, 2001

- a “Yahoo Games” “Sign-in and Registration Help” page, numbered by the Examiner as page 17, from an archive dated August 16, 2000.

The Examiner’s citation of material recently downloaded from the Internet and lacking unequivocal evidence of having existed prior to April 21, 2000 is respectfully traversed. Because of the highly changeable nature of the Internet and material appearing on the Internet, without clear and unequivocal evidence as to the original date of the specific material, it is not reasonable to consider material recently downloaded from the Internet as evidence of prior art.

An Internet “page” may contain material having a variety of dates of appearance. Internet pages originally appearing on a certain date are commonly and frequently updated at a later time to include new material which never appeared on that date. Accordingly, internal dates within the pages themselves cannot be accepted as evidence of the date of the material of the page. In particular, a copyright date or similar date appearing on a web page does not constitute evidence of the date of any material on that page.

Regarding the Examiner’s page 6 in particular, the existence of link to a Yahoo “backgammon” game on December 12, 1998, as shown on the Examiner’s page 2, does not establish that any features appearing in the screen shot on the Examiner’s page 6 existed as of December 12, 1998. Because of the highly changeable nature of material on the Internet, as discussed above, the current version of the Yahoo “backgammon” browser illustrated on the Examiner’s page 6 may be completely different from what existed on December 12, 1998, and may exhibit features which did not exist on December 12, 1998. It is specifically noted that links in the archive, especially those to active sites, are not faithfully preserved

in the archive.² Thus, the Examiner's citation of the screen shot on page 6 as prior art is respectfully traversed.

It is noted that both 35 USC §102 (a) and (b) contain the stipulation “described in a printed publication” when listing conditions for non-patentability. The Applicant is not aware of any broad authoritative interpretations of this phrase (judicial or otherwise) and consequently construes the term “printed publication” in a literal sense according to the generally-accepted meaning of the word “printed” appearing in dictionaries and other lexical references as “matter printed by any of various mechanical processes” (Webster) — i.e., tangible imprinted material. Moreover, use of the term “printed publication” in MPEP §901.05, §901.06, and §903.01 clearly regard “printed publications” as being published patents, books, and periodicals such as journals, which are embodied as tangible printed documents having the attributes of permanence, non-changeability, and verifiability. Other embodiments of such material, such as microfilm and CD, are clearly presented as being secondary media upon which the printed publications have been reproduced for convenient access, rather than as primary sources. This is particularly apparent in MPEP §901.06 regarding non-patent publications. In addition, MPEP §904.02, which deals with “Internet Searching”, addresses only issues of confidentiality when using the Internet for searching, and does not include the use of downloaded Internet material as prior art *per se*.

Accordingly, the appearance of material on the Internet by itself does not constitute a “printed publication” or other form of primary evidence of prior art. At best, material on the Internet constitutes only supporting evidence that the material's content was “known” per 35 USC §102 (a), and for Internet material to be admissible in this capacity would require clear and unambiguous evidence of the precise posting date.

2. Please see the discussion of “Internet Archive Wayback Machine” links on page 8, and footnote 5.

The following are relevant points about the “Internet Archive Wayback Machine” relied on by the Examiner in the present Office Action:

1. The original timestamp of the archived document is embedded in the URL of the archived document, in the format “YYYYMMDDhhmmss”³. In the case of the Examiner’s page 16 as noted above, the URL contains “20001018204502” which corresponds to October 18, 2000 8:45:02 PM, which was *after* the priority date of the present application as noted above. The citation of page 16 as prior art against the present application is therefore respectfully traversed.

In the case of the Examiner’s page 17 as noted above, the URL contains “20000816161754” which corresponds to August 16, 2000 4:17:54 PM, which was *after* the priority date of the present application as noted above. The citation of page 17 as prior art against the present application is therefore respectfully traversed.

2. According to the “Internet Archive Wayback Machine”, the earliest date of the Müller material (of the “Globalwide Network Academy”) cited by the Examiner (<http://www.desy.de/gna/html/cc/Tutorial/node3.htm>) is July 7, 2002,⁴ over two years *after* the priority date of the present application. Furthermore, the current version now appearing on the Internet (and utilized by the Examiner) was posted no earlier than December 17, 2002.⁴ The entirety of the Müller material therefore does not qualify as prior art against the present application, and all rejections based on the Examiner’s citation of Müller as prior art are respectfully traversed. It is noted that the Examiner has relied upon Müller at least 16 times in the present Office Action.

3. as specified in <http://web.archive.org/collections/web/advanced.html>

4. Please see attached “Search Results”, page A-1.

3. Links appearing in archived material do not necessarily correspond to the date of the archived text in which the links are embedded, and can come from the “live Web” (i.e., current material), rather than from the archive.⁵ Material downloaded from the “Internet Archive Wayback Machine” may therefore not reliably reflect the assumed date indicated in the URL.⁵ If such archive material is to be cited as prior art, it must be used with caution and it must be prefaced with a suitable notice and proviso to avoid misinterpretation.
4. Dynamic pages which contain embedded JavaScript cannot in general be faithfully archived, and such archived pages do not necessarily represent the dynamic page as it originally appeared when archived.⁵
5. Certain pages on the Internet are completely unavailable in the “Internet Archive Wayback Machine” because they are blocked from being archived.⁶

In particular, there is no archived information available for the link “Yahoo! Profile” featured on page 2 of the material submitted by the Examiner. This particular reference is relevant to the subject matter because the “Yahoo Profile” may contain user personal information and thus be highly pertinent to the present Office Action. As shown on page A-8, there is a “retrieval exclusion” on this link, and as shown on page A-9, there is also a “query exclusion” on all such links. The “robots.txt” exclusion is given as: **“User-agent: * Disallow: /”**

Thus, information on the “Yahoo Profile” is limited to what currently appears on the Internet, and no prior art evidence of the content and significance of a “Yahoo Profile” is readily available.

5. as noted in <http://www.archive.org/about/faqs.php#4>

6. as noted in <http://web.archive.org/collections/web/faqs.html#exclusions>

6. Furthermore, archived material referenced in the “Internet Archive Wayback Machine” itself exhibits a degree of transience which suggests unreliability and unsuitability as evidence. To demonstrate this, the present response includes pages denoted as A-2 through A-7, with listings of archived material (showing all duplicates) for <http://games.yahoo.com/> corresponding to page 1 of the material submitted by the Examiner. On March 2, 2005 the Examiner obtained page 1 showing that 16 pages of archived material were available from year 1999 for the specified URL. On April 21, 2005 the Applicant obtained page A-2 showing that only 14 pages of archived material were available from year 1999 for the specified URL. Pages from Jan. 28, 1999 and Feb. 22, 1999 were no longer available. Other anomalies are exhibited, including the appearance of pages that were previously unavailable. Regardless of whatever technical explanations may be proposed for these anomalies, it is clear that these so-called “Internet Archive” results are of limited use as evidence, and in fact may be unreliable.

Specifically, it is important that the authenticity of such material be capable of independent verification through physical examination of the material itself, and/or by comparison against a certified original document held in a suitably-secure central repository. Otherwise, it is far too easy to modify or forge such material, especially when the material consists of data in an unauthenticated open format such as ASCII text or HTML text. As demonstrated above, the “Internet Archive Wayback Machine” does not meet the most basic criteria to qualify as a suitable central repository for such purposes: some of the archived material available on March 2, 2005 was no longer available a mere seven weeks later, on April 21, 2005 and therefore could not at that time be

substantiated as authentic.

Based on the above points, it can be appreciated that material from the “Internet Archive Wayback Machine” is suitable only for informal purposes, and lacks the permanence and stability necessary to rely upon as primary evidence of prior art.

Submitted Material Does Not Anticipate the Claims of the Present Application

The Examiner has relied extensively on Yahoo, such that *Yahoo is ultimately the basis for all rejections of the claims of the present application as cited in the present Office Action dated March 7, 2005.*

The Examiner's reliance on Yahoo as prior art against the present application is respectfully traversed. As is demonstrated below, Yahoo fails to anticipate any claims of the present application, both as a disclosure and as evidence of actual use.

The claims of the present application are directed to an arrangement, method and system for protecting software from unauthorized copying and distribution by embedding within the software a personalization containing personal information of the authorized user. The claims of the present application are supported by, and are in accordance with, detailed descriptions of the invention and embodiments thereof which appear in the specification and drawings of the present application.

In the present Office Action mailed March 7, 2005 (page 2 - 3), it is stated that

“As per claim 1, Yahoo discloses in an information stream associated with deliverable published software from a software publisher to a customer, an arrangement for software protection comprising a personalization, said personalization incorporated into the information stream by the software publisher prior to delivery of the published software to the customer and prior to receipt of the published software by the customer- and containing pre-existing personal information fundamentally related to the customer (see Yahoo page 6 where the personalization is the name and rating in the right sub window).”

The above assertion in the present Office Action regarding the disclosure of Yahoo is respectfully traversed. Nowhere in any of the submitted material related to Yahoo⁷ is there any disclosure of any of the following elements, which are recited in the claims of the present application:

7. For a detailed analysis of the Yahoo-related material submitted as prior art, please refer to the Appendix, beginning on page 18.

- The material contains no disclosure, description, or evidence of any specific content “incorporated into the information stream” that is “associated with deliverable published software” (as recited, for example, in claim 1 of the present application). In particular, the material contains no disclosure, description, or evidence that personal information is embedded in deliverable published software.
- The material contains no disclosure, description, or evidence of any “arrangement for software protection” (as recited, for example, in claim 1 of the present application).

In particular, the Yahoo “backgammon” screen shot on the Examiner’s page 6 is discussed in detail on page 19 of the present response⁸, and is shown not to constitute evidence of prior art, and is further shown not to have anticipated the claims of the present application.

On the contrary, as is shown on page A-10, Yahoo makes it clear that personal information (in “Yahoo Profiles”) is collected for use in a searchable on-line database, and it is from this database that all personal information is taken and delivered to game-playing users as data (not as software) for display purposes.⁹

Moreover, in the comprehensive discussions regarding its use of the above personal information, Yahoo does not disclose that any personal information is ever incorporated into software. This is detailed on pages A-14 and A-15, which show Yahoo’s policy that “covers Yahoo!’s treatment of personally identifiable information that Yahoo! collects when you are on the Yahoo! site, and when you use Yahoo!’s services.” Nowhere in this

8. The “backgammon” screen shot is also discussed on page 5, regarding lack of evidence of date for establishing prior-art status.

9. Page A-10 is from the current <http://search.profiles.yahoo.com>, as referenced in the “Yahoo! Profile” link on Examiner’s page 2. As shown on pages A-8 and A-9, this page is unavailable from the Internet Archive, and is thus not available as prior art. It is thus the current “Yahoo! Profile” page that is shown on page A-10.

policy is it disclosed, described, or suggested that Yahoo incorporates any personal information into software in any manner. On the contrary, Yahoo states only that “Yahoo! may set and access Yahoo! cookies on your computer” (page A-15); and as shown on page A-17, Yahoo clearly states that “A cookie is a small amount of *data*” (emphasis supplied). The present application explicitly excludes data from being considered as subject matter of the present invention,¹⁰ and therefore the present application excludes data from being considered as subject matter of the present claims. Therefore, Yahoo’s use of cookies and the data therein does not anticipate the claims of the present application.

Not only does Yahoo’s information fail to describe or suggest the incorporation of personal information in software, but if Yahoo were to incorporate personal information in software, it would be expected that Yahoo would be obligated to disclose this sensitive use of a user’s personal information in the same manner as it discloses the inclusion of a user’s personal information in “cookies”.

Thus, Yahoo does not incorporate personal information into a software information stream for display, but simply sends information (including personal information) as displayable data to running browser applications. Yahoo consequently does not meet claim 1.

The rejection of claim 1 based on Yahoo is therefore respectfully traversed. The rejections of independent claims 24 and 28 also rely on Yahoo in a similar manner and are likewise respectfully traversed as well.

10. For example, please see the present application page 31 lines 10 - 11 and page 36 lines 12 - 15.

The Limitation of Software Protection

The present invention involves using personal information of the specific authorized user to protect software delivered to that user from unauthorized copying and distribution. According to the present invention, embedding personal information of the authorized user in the software and then conspicuously displaying this information to whoever uses the software will remind the specific authorized user that the software is licensed individually to him or her as an identifiable individual, and will thereby discourage the authorized user from copying and distributing the software to others.

The present application prominently emphasizes this in every aspect (title, field and background, summary, embodiments, abstract, and drawings) in such a way as to establish that protecting software is the central objective of the invention. In no case does the present application propose that there is any inventive merit in merely collecting and disseminating personal information within software, without some sort of definite objective. Accordingly, the three independent claims of the present application all contain the limitation of protecting software.¹¹

More particularly:

1. Merely embedding personal information in software has no obvious usefulness (it serves no programmatic or operational function, so why do it? what is it for?) and therefore without an explicitly-stated useful objective the embedding of personal information in software lacks inherent utility. Therefore, a recitation of the use to which the embedded personal information is to be put is an essential element of any patent claim for an invention based thereon, and is thus a limitation that cannot be ignored.

¹¹ Claim 1: (“...an arrangement for software protection...”); claim 24: (“...for protecting published software...”); and claim 28 (“...for protecting published software...”).

2. There are conceivably a number of different useful objectives which could be achieved by embedding personal information in software.¹² The form, structure, and nature of embedded personal information in software is determined by the objective and the use for which the embedding is intended.
3. Following the above point, it can be appreciated that personal information embedded in software for one purpose is not necessarily suitable to perform for a different purpose.

As noted previously (on page 11 of the present response) the submitted material on the Examiner's pages 1 - 17 does not disclose or suggest that Yahoo Games embeds personal information in software. However, even if Yahoo Games were to embed personal information in software, Yahoo's purpose for doing so would be for identifying, scoring, and rating participants in games. (Yahoo clearly has no need for software protection — the games are distributed free of charge and Yahoo places no apparent restrictions on users to discourage them from copying and distributing the games.)

Therefore, even if prior art Yahoo Games were to embed personal information in software to support game-playing, this would result in a structural difference between such prior art and the present invention. In other words, the way Yahoo uses personal information for game-playing is incapable of providing any protection for software, as is provided by the present invention. For this reason, even if Yahoo were to embed personal information in software, Yahoo's use in rating game-players would not meet the claims of the present application, which are directed to the protection of software.

MPEP §2111.02 discusses the inclusion of limitations in the preamble of a claim and notes that applicable court decisions have held that "if the claim preamble, when read

12. The present application mentions, in passing, several additional uses for a personalization embedded in software: detecting the source of a computer virus (page 73 lines 13 - 15); and tracking data from its originator (page 77 line 11 - page 78 line 13).

in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is ‘necessary to give life, meaning, and vitality’ to the claim, then the claim preamble should be construed as if in the balance of the claim”. MPEP §2111.02 further notes that “statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference between the claimed invention and the prior art. If so, the recitation serves to limit the claim.”

In the case of the present invention, the recited use in the protection of software is, as described above, ‘necessary to give life, meaning, and vitality’ to the claim. Moreover, the recited use in the protection of software results in a ‘structural difference between the claimed invention and the prior art’. Following MPEP §2111.02, then, this recitation serves to limit the claim and distinguish the present invention from the prior art.

Therefore, because none of the submitted prior art discloses, shows evidence of, nor suggests using embedded personal information for protecting software, it may be appreciated that the embedding of an authorized user’s personal information in software for protecting the software according to the present invention and as claimed in the present application is both novel and non-obvious.

Summary

The Examiner's comments have been given careful and thorough consideration in the above remarks. As above presented, the Applicant respectfully contends, and has demonstrated with supporting evidence, that the material submitted as prior art against the present application does not in fact constitute relevant prior art and does not anticipate the claims of the present invention:

- Significant portions of the material relied upon by the Examiner as prior art are not dated before the priority date of the present application and thus cannot constitute prior art against the present application.
- None of the material submitted as prior art actually describes or demonstrates the embedding of personal information in a software information stream.
- None of the material submitted as prior art pertains to software protection, which is an essential element of the present invention and limitation in the claims.

In view of the above remarks and supporting evidence, it is respectfully submitted that claims 1-9 and 11-33 are in condition for allowance. Notice of allowance is therefore respectfully and earnestly solicited.

Respectfully submitted,

A handwritten signature in dark ink, appearing to be 'Moshe Brody', written over a horizontal line.

Moshe Brody, Applicant

Date: May 2, 2005

Appendix: “Yahoo”-Related Materials Submitted by the Examiner as Prior Art

Page references are according to the Examiner’s numbering.

Page 1 Internet Archive “Wayback Machine” Search Results (dated March 2, 2005) for <http://games.yahoo.com> — contains no description of prior art.

Compare with pages A-2 through A-7 regarding variability and unreliability of Internet Archive “Wayback Machine” materials for use as evidence of prior art, as discussed on page 9 of the present response.

Page 2 Yahoo help page archive (dated December 12, 1998)

Contains links to a number of interactive Java-based games playable on the Internet, including board games, card games, and tile games. The links, however, are not to archived material.¹³

Contains a link to information on the “Yahoo Profile”, which purports to contain personal information about users. As noted above, however, this link is not to archived material.¹³ Furthermore, as shown on pages A-8 and A-9, prior-art information on the “Yahoo Profile” is not available in the archive.¹⁴ Accordingly, the Applicant has downloaded the current “Yahoo Profile” information for reference, appearing on page A-10.

Contains “Important Game Notes” for users.

Summary: Page 2 does not contain any description of:

- embedding a personalization in software; or
- software protection;

and thus page 2 does not anticipate any of the claims of the present application.

Page 3-5 Yahoo Games Registration page screen shots (dated March 2, 2005).

These pages do not constitute prior art, because they are dated after the priority date of the present application.¹⁵

In any event, these pages deal only with registering user information in Yahoo’s online database, and do not contain any description of:

- embedding a personalization in software; or
- software protection;

13. Please see discussion of “Internet Archive Wayback Machine” links on page 8, and footnote 5.

14. Please see discussion of “Internet Archive Wayback Machine” blocked material on page 8, and footnote 6.

15. Please see discussion of submitted material not prior to April 21, 2000, on page 4.

and thus pages 3-5 do not anticipate any of the claims of the present application.

Page 6 Screen shot of Yahoo “Backgammon” table browser.

This page does not constitute prior art in any event, because it is a screen shot of a recently-downloaded Internet page, and the features thereof lack evidence of having existed prior to April 21, 2000.¹⁶

The Examiner contends (on page 3 of the present Office Action) that this shows “the personalization is the name and rating in the right sub window”.¹⁷ It is noted, however, that:

- no personalization is actually shown in the image;
- the personalization(s) that can ostensibly be shown in the sub window are downloaded from the “Yahoo Profile” database as data and are not described as being embedded in any software — a limitation recited in the claims of the present application (“in an information stream associated with deliverable published software ... a personalization ... incorporated into the information stream...”);
- the personalization(s) that can ostensibly be shown in the sub window are clearly identified in the window text as containing information about the other players, not the current user (the “customer”) of this software, and thus cannot be taken as “containing pre-existing personal information fundamentally related to the customer” — a limitation recited in the claims of the present application.

In summary, page 6 does not contain any description or evidence of use of:

- embedding a personalization in software; or
- software protection;

and thus page 6 does not anticipate any of the claims of the present application.

Page 7-15 Yahoo Games “Frequently Asked Questions” archive (dated March 2, 1999)

None of the “Frequently Asked Questions” or answers thereto contain any description of:

- embedding a personalization in software; or
- software protection;

and thus pages 7-15 do not anticipate any of the claims of the present application.

16. Please see discussions on pages 4 and 5.

17. Please see the complete quotation from the present Office Action on page 11 of the present response.

The “Frequently Asked Questions” briefly touch upon “Privacy Issues”, however, which deal with personal information collected by Yahoo, and the ways in which the personal information is used, particularly regarding the use of “cookies”. To clarify these issues, the Applicant has downloaded the earliest-available “Yahoo Privacy Policy” from the Internet Archives (see pages **A-11** through **A-13**), appearing on pages **A-14** through **A-18**. Although material does not constitute prior art (because the earliest date available was after April 21, 2000), the material clearly shows that Yahoo’s use of personal information at the time of the priority date of the present application did not include:

- embedding a personalization in software; or
- software protection;

and thus, Yahoo Games did not make any use of personal information that anticipates any of the claims of the present application.

Page 16 Yahoo “Sign-in and Registration Help” archive (dated October 18, 2000).

This page does not constitute prior art, because it is dated after the priority date of the present application.

In any event, however, page 16 deals only with login to an Internet account, and does not contain any description of:

- embedding a personalization in software; or
- software protection;

and thus page 16 does not anticipate any of the claims of the present application.

Page 17 Yahoo “Sign-in and Registration Help” archive (dated August 16, 2000).

This page does not constitute prior art, because it is dated after the priority date of the present application.

In any event, however, page 17 deals only with password and security issues for login to an Internet account. Although it discusses “personalized” services and “personalized” Yahoo pages, it does not contain any description of:

- embedding a personalization in software; or
- software protection;

and thus page 17 does not anticipate any of the claims of the present application.

The citation of pages 1 through 17 as prior art against the present application is therefore respectfully traversed.